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OIL STATES ENERGY SERVICES, LLC, PETITIONER

v.

GREENE'S ENERGY GROUP, LLC, ET AL.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

BRIEF FOR APPLE INC. AS AMICUS CURIAE IN SUPPORT OF RESPONDENTS

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BRIEF FOR APPLE INC. AS AMICUS CURIAE IN SUPPORT OF RESPONDENTS

INTEREST OF AMICUS CURIAE[1]

Amicus Apple Inc. (Apple) is a Cupertino, California-based corporation established in 1977. Apple designs, manufactures, and markets mobile communication and media devices, personal computers, and portable digital music players, and it also sells related products and services. Its well-known consumer products include the iPhone, iPad, iPod, Mac, Apple Watch, and Apple TV. Apple offers operating systems for those products

[1] All parties have consented to the filing of this amicus curiae brief through blanket consent letters filed with the Clerk. No counsel for any party authored this brief in whole or in part, and no person or entity other than amicus curiae or its counsel made a monetary contribution intended to fund the preparation or submission of this brief.

as well as related services, such as iCloud (a cloud storage service that allows users to store media and access them on different devices) and Apple Pay (a payment service that allows users to make contactless payment in stores using a mobile device).

Apple's business relies on the innovative skills and technical competence of its personnel. As a result, Apple holds rights to patents relating to various aspects of its products and services, and it regularly files patent applications in the United States, as well as around the world, to protect the innovations that arise from its research, development, and design. Apple has faced a significant number of patent claims asserted against it and has likewise initiated infringement actions in United States courts, the U.S. International Trade Commission, and foreign jurisdictions.

Apple also has had extensive experience with the U.S. Patent and Trademark Office (PTO), including through initial patent prosecution as well as the various forms of post-issuance proceedings that have existed over the years since Apple's founding. As described in more detail *infra*, Apple has relevant experience with the American Invents Act (AIA) and the post-issuance proceedings it created, including inter partes review (IPR). Indeed, through 2016, Apple had filed the most IPR petitions of any petitioner, with its 267 petitions comprising almost 5% of all petitions filed since 2012. Pedram Sameni, *Patlex Chart 25: Apple Remains Number One IPR Petitioner in 2016 Despite the Drop in Litigation*, Patexia (Jan. 25, 2017), https://www.patexia.com/feed/weekly-chart-25-apple-remains-number-one-ipr-petitioner-in-2016-despite-the-drop-in-litigation-20170124. Many of those IPR petitions were related

to patent infringement litigation in which Apple was a defendant and, in a number of those matters, expensive, unpredictable, and lengthy patent infringement litigation in district court was averted by efficient adjudication of the patentability of the patent claims by the Patent Trial and Appeal Board (PTAB). As a company that holds a substantial patent portfolio and often faces infringement suits, a sampling of Apple's experience with IPRs illustrates IPR's salutary effects for the patent system.

SUMMARY OF THE ARGUMENT

By establishing IPR in the AIA, Congress created an administrative review mechanism within the patent-issuing agency for determining whether a patent was correctly issued in the first place. This choice allows the PTO—specifically, the PTAB—to review the agency's own decisions under the standards employed in the initial review of the patent's claims and, where appropriate, to correct those decisions, subject to thorough judicial review in the Federal Circuit. Indeed, Congress's decision to allow for what is effectively intra-agency appellate review of the initial patent examination is wholly consistent with longstanding principles of administrative law, such as administrative exhaustion, which helps "promote efficiency" by allowing agency proceedings to serve as a "quick[] and economic[]" alternative to federal court litigation. *Woodford* v. *Ngo*, 548 U.S. 81, 89 (2006). In particular, where decisions from this Court make clear that the PTO has been applying the wrong standard for patentability, the AIA allows the same agency to correct such mistakes without the need for expensive, resource-intensive, and time-consuming litigation. Doing so is both sensible and efficient.

Apple is a frequent litigant in patent disputes and has extensive firsthand experience with the positive effects of Congress's enactment of IPR (and analogous other post-grant proceedings). For example, in several cases, Apple has received a ruling on patentability from the PTAB in an efficient and focused administrative review proceeding, reducing, or even eliminating the need for litigation. The specific experiences with the PTAB discussed *infra* are mere examples, and they represent more generally how litigants are realizing the benefits that Congress intended the AIA to bestow—saving time, increasing predictability and transparency, and reducing litigation costs.

ARGUMENT

I. IPR Benefits The Patent System Because The PTAB Can Reassess Previous Determinations Of Patentability

The core benefit of IPR for the patent system is the placement of authority for remedying certain errors in the issuance of patents with the very agency that issued the patent in the first place, the PTO. For instance, the PTO can reassess patents where developments in the law have made clear that the patent claims are unpatentable and should never have been issued in the first place. Permitting the PTO to correct its own errors in light of subsequent clarifications in the law allows for an efficient course-correction that improves the quality of individual patents and benefits the patent system generally.

A. Recognizing The Limitations Inherent In The Patent Examination Process, Congress Enacted The AIA To Allow The PTO To Review Its Own Decisions

The PTO conducts initial patent examination ex parte, and the decision whether to grant a patent generally is made by one or more of the PTO's patent examiners. The rigor and quality of the initial decision to issue a patent depends primarily on the applicant and examiner, since the role of third parties is tightly circumscribed: they may not participate as stakeholders or advocates in the review process, and their role is limited to "submit[ting] for consideration and inclusion in the record of a patent application" pieces of prior art. 35 U.S.C. 122(e). As one example of the limitations inherent in this process, relevant prior art that should render claims unpatentable may never come to the attention of the examiner. See, *e.g.*, PTAB Bar Ass'n Amicus Br. 10-14. The examiner may also make the initial patentability determination applying a legal standard deemed incorrect in judicial decisions interpreting the bounds of patentability. Due to the absence of an adverse party, a decision to grant a patent is initially made without the benefit of a third-party viewpoint and without any administrative appellate review or Article III review. The PTO has authority to reexamine the grant of a patent in ex parte reexamination, but there as well the review of patentability is conducted ex parte and the third-party petitioner has no meaningful right to participate. 35 U.S.C. 301 *et seq.*

Through the AIA, Congress created a post-issuance, adversarial administrative review process that is a natural corollary to the ex parte patent issuance process.

Recognizing the constraints inherent in the patent issuance process and the ex parte reexamination process, Congress designed IPRs as a way for the PTO to review and correct its own mistakes when the agency had issued a patent erroneously. Seeing "a growing sense that questionable patents [were] too easily obtained and [were] too difficult to challenge," Congress responded by enacting "a more efficient and streamlined patent system that [would] improve patent quality and limit unnecessary and counterproductive litigation costs." H.R. Rep. No. 98, 112th Cong., 1st Sess. Pt. 1, at 39-40 (2011). This Court has frequently recognized the benefits of a process informed by participation of a motivated, opposing party in producing the best-informed determinations of issues: "the adversarial process leads to better, more accurate decisionmaking." *Kaley* v. *United States*, 134 S. Ct. 1090, 1103 (2014). Indeed, "[t]he value of a judicial proceeding * * * is substantially diluted where the process is ex parte" because the "fundamental instrument for judicial judgment" is "an adversary proceeding in which both parties may participate." *Carroll* v. *President & Comm'rs of Princess Anne*, 393 U.S. 175, 183 (1968). IPR and its analogues, covered business method patent review (CBM) and post-grant review (PGR), employ the benefits of adversity of interests in a tightly circumscribed proceeding to focus the PTO on any as-yet-unconsidered issues, such as prior art of which the patent examiner was not aware or inconsistent positions taken by a patent applicant.[2] The PTO can then review

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[2] There are slight differences in which patents are eligible for IPR, CBM, or PGR and in which grounds of patentability the PTAB may review. Compare 35 U.S.C. 319 (IPR), 35 U.S.C. 321 (PGR), and Leahy-Smith America Invents Act § 18(a), Pub. L. 112-29, 125

its own initial decision to issue a patent, employing the same standards that governed the initial examination.

The AIA thus represents both (1) Congress's acknowledgement that many patents had been issued for claims that were not patentable, including claims that were revealed as unpatentable by later judicial clarifications, see pp. 7-9 *infra*, and (2) Congress's determination to address that problem through creation of an efficient and reliable administrative appeal process by which the PTO could review its decisions and, when necessary, correct them.[3]

B. By Enacting The AIA, Congress Allowed The PTO To Address Critical Clarifications In Patent Law Regarding The Patentability Of Claims

The AIA expressly responded to several watershed decisions of this Court that clarified the legal standards for patentability. By creating mechanisms through which the PTO can revisit patents for claims that, in light of those clarifications of patentability standards, should not have been approved, Congress sought "to improve patent quality and restore confidence" in the the patent system. H.R. Rep. No. 98, 112th Cong., 1st Sess.

Stat. 284, 329-331 (CBM). All three types of review are conducted by the PTAB according to substantively identical procedures. See 37 C.F.R. 42.1 *et seq.*

[3] Notably, the Director of the PTO may initiate reexamination "[o]n his own initiative, and any time." 35 U.S.C. 303(a); 37 C.F.R. 1.520. This mechanism further reflects the importance of the PTO's ability to correct its mistakes in order to ensure public confidence in the patent system.

Pt. 1, at 48; *id.* at 39 (citing, among others, *Bilski* v. *Kappos*, 561 U.S. 593 (2010) (patentability of abstract ideas under 35 U.S.C. 101) and *KSR Int'l Co.* v. *Teleflex, Inc.*, 550 U.S. 398 (2007) (obviousness under 35 U.S.C. 103)). Enhancing patent quality by conforming patents to this Court's clarifications in the law is consistent with the fundamental goal of the patent system: for Congress "to promote the Progress of Science and useful Arts," U.S. Const. Art. I, § 8, which supersedes a patentee's interest in a specific patent mistakenly issued under an erroneous standard, *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661, 665 (1944); see *Lear, Inc.* v. *Adkins*, 395 U.S. 653, 670-671 (1969) (noting "the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain").

The establishment of IPRs allowed the PTO to implement quickly and efficiently important clarifications in the law regarding obviousness and anticipation. If a patent's claims are obvious or anticipated, the claims are invalid, and "the patent never should have issued in the first place." *Microsoft Corp.* v. *i4i Ltd. P'ship*, 564 U.S. 91, 96 (2011). "[T]he Court's decisions have moved in the direction of improving patent quality and making the determination of patent validity more efficient," and the PTAB helps carry out those goals. H.R. Rep. No. 98, 112th Cong., 1st Sess. Pt. 1, at 39. The Manual of Patent Examining Procedure (MPEP) has been revised to incorporate decisions like *KSR* as relevant to patentability determinations, confirming that the PTO has extended the Court's guidance to the initial patent examination. *E.g.*, PTO, Dep't of Commerce, *MPEP* § 2141 (9th ed. 2015) (containing extensively revised examination guidelines for obviousness "in view of" *KSR*).

Congress also reasonably determined that the PTAB should help to implement this Court's decisions regarding patentable subject matter by canceling patents that, in light of these decisions, were unpatentable for claiming abstract ideas.[4] Subsequent decisions, such as *Alice Corp.* v. *CLS Bank International*, 134 S. Ct. 2347 (2014), confirm that Congress was correct in seeing a need to implement new processes by which the PTO could address these significant developments by identifying patents that were wrongly issued under earlier, erroneous standards.

C. Precedent And Common Sense Support The PTAB's Robust Intra-Agency Review Of The Initial Examination Decisions Made By PTO Examiners In An Ex Parte Process

Core principles of administrative law support Congress's decision to allow an agency to review the acts of first-line agency decision-makers and, when necessary, remedy their errors. For example, the requirement that parties exhaust administrative remedies prior to seeking judicial review reflects this Court's recognition of the benefits of internal agency review. "[N]otions of administrative autonomy require that the agency be given

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[4] The remedial focus of the AIA is exemplified in Congress's tailored treatment of business-method patents. Congress recognized that the PTO had issued a "large number of business-method patents, many or possibly all of which [were] no longer valid." 157 Cong. Rec. 3412, 3420 (2011) (manager's summary). The very concept of the transitional CBM program, which will sunset on September 16, 2020, is consistent with recognizing the primary role of the PTO in applying this Court's precedent in the first instance—as, for example, in correcting what *Bilski* clarified to be erroneously issued patents.

a chance to discover and correct its own errors." *McKart* v. *United States*, 395 U.S. 185, 195 (1969). Indeed, the Court has recognized that judicial review "may be hindered" if the agency is not permitted "to make a factual record, or to exercise its discretion or apply its expertise." *Ibid.* Put simply, "exhaustion promotes efficiency." *Woodford* v. *Ngo*, 548 U.S. 81, 89 (2006).

Permitting the PTO to review for and correct its own mistakes is all the more justified in light of the ex parte nature of the original patent examination process. Because there is no third-party participant opposing the applicant in the proceeding, there is no opportunity to seek immediate appellate review within the agency of the examiner's decision to issue a patent. Moreover, once the patent is issued, an interested third party has no right to seek judicial review of the examiner's administrative determination: Under a long line of unbroken Federal Circuit precedent generated through a variety of creative attempts to establish jurisdiction, "a potential infringer cannot sue the PTO under the APA to attack the validity of an issued patent" because "[t]he comprehensive legislative scheme of the Patent Act precludes judicial review of the reasoning of PTO decisions to issue patents after examination." *Pregis Corp.* v. *Kappos*, 700 F.3d 1348, 1357 (2012) (internal quotation marks and alterations omitted).

Finally, allowing the PTO to revisit its prior decisions through a more targeted proceeding with adverse participants makes eminent practical sense. Rather than requiring potentially costly infringement litigation in order to determine a patent's validity, the IPR process puts the patent back in the hands of the PTO for a

focused, time-limited second look, by a panel of administrative appellate judges, subject to Article III judicial review. This arrangement is a reasoned and justified approach to the problems inherent in the ex parte patent system that both this Court and Congress recognized.

D. The Structure And Process Congress Designed For The PTAB In The AIA Make Well-Informed And Correct Outcomes Likely

The wisdom of Congress's choice to vest review of patent examiners' patentability determinations in a panel of administrative PTAB judges is borne out by the process's tendency to produce well-reasoned and correct decisions. This tendency is confirmed by the fact that roughly 75% of PTAB rulings were affirmed by the Federal Circuit outright, with no remand whatsoever as of September 1, 2017. Elliot C. Cook et al., *Federal Circuit PTAB Appeal Statistics*, AIA Blog (Sept. 22, 2017) (*Statistics*), https://www.finnegan.com/en/insights/blogs/america-invents-act/federal-circuit-ptab-appeal-statistics-august-1-2017-copy.html.

PTAB judges, like their counterparts in administrative judicial positions in other agencies, must be qualified and specialized, and the process over which they preside is robust and designed to produce quality results in which the patent system can be confident. PTAB judges must have as "basic qualifications" "[m]any years of experience in the practice of patent law" and "[d]egree(s)/work experience in science or engineering," and the agency prefers that they have experience with "electrical engineering, software, [or] data processing" patents. PTO, PTAB Brochure, https://www.uspto.gov/sites/default/files/documents/ptab_brochure_v2_4_10_

14.pdf/; see also 35 U.S.C. 6(a) (requiring that PTAB judges be "persons of competent legal knowledge and scientific ability"). These judges benefit in IPRs from the inter partes process established in the AIA, receiving extensive briefing and oral arguments at which they can press advocates on both sides to answer difficult questions. See 37 C.F.R. 42.1 *et seq.* (setting forth rules for trial practice and procedure before the PTAB); see also 35 U.S.C. 316(a). Importantly, PTAB judges can receive new evidence and hear testimony that bears on the question of patentability. 37 C.F.R. 42.53, 42.61-42.65. And, when multiple post-grant reviews are taking place at once, the PTO can coordinate them to ensure efficient and consistent proceedings. 35 U.S.C. 325(d). This process allows for a fully informed and searching second look at whether a patent's claims should have been granted as an initial matter, all subject to important limits, such as a time limit of a maximum of one year (or an additional six months on good cause) for the IPR to run its course after institution. 35 U.S.C. 316(a)(11), 37 C.F.R. 42.100(c). Statistics to date suggest that the PTAB is generally reaching the correct result in cases it considers; through September 1, 2017, the Federal Circuit affirmed the PTAB's decisions in their entirety 74.07% of the time and reversed decisions in their entirety just 11.11% of the time. *Statistics*, *supra*. The specific numbers for IPRs are nearly the same, with the Federal Circuit affirming completely in 74.07% of appeals and reversing or vacating completely in just 11.57%. *Ibid.*

Crucially, and in contrast to proceedings before federal district courts, Congress designed IPRs in the well-

established mold of intra-agency administrative reviews. The PTAB reviews the same question as the initial examiner—whether the PTO should "cancel as unpatentable 1 or more claims of a patent only on a ground that could be raised under [35 U.S.C.] 102 or [35 U.S.C.] 103," 35 U.S.C. 311(b)—without deference to the initial examiner's decision to issue the patent, beyond the initial threshold requirement that a petitioner show "a reasonable likelihood" of success challenging at least one challenged claim, 35 U.S.C. 314(a). The burden on the challenger is simply that of "proving a proposition of unpatentability by a preponderance of the evidence." 35 U.S.C. 316(e). Moreover, before the PTAB, a claim in an unexpired patent receives its "broadest reasonable construction in light of the specification of the patent," 37 C.F.R. 42.100(b), which is the same standard employed in deciding whether to issue the patent in the first place, see *Cuozzo Speed Techs., LLC* v. *Lee*, 136 S. Ct. 2131, 2143 (2016).

In contrast, federal district courts evaluate the validity of patents through a far more deferential standard. District courts presume the validity of a patent in suit, 35 U.S.C. 282, and a party challenging the validity of a patent's claims on a ground like obviousness "must prove invalidity by clear and convincing evidence." *E.g.*, *Cuozzo*, 136 S. Ct. at 2144 (internal quotation marks and citation omitted). District courts also construe claims through the "ordinary and customary meaning" standard of *Phillips* v. *AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (citation omitted), cert. denied, 546 U.S. 1170 (2008).

These differences in relevant standards applied by the PTAB to evaluate patentability in IPRs and district

courts to evaluate validity in litigation are meaningful: some claims will fall in either the gap between a "preponderance of the evidence" and "clear and convincing evidence," or the gap between "broadest reasonable interpretation" and "ordinary and customary meaning." As a result, by necessity, some claims will survive a validity challenge in district court litigation, but would properly be set aside under a PTAB review assessing whether the agency should have issued the patent as an initial matter. In other words, only by establishing an adversarial administrative review mechanism could Congress provide for genuine review of the question whether the patent was wrongly issued in the first instance.

As with other administrative appeal processes, the PTAB remains fully subject to judicial review in the Federal Circuit. The PTAB's conclusions of law are reviewed de novo, including claim construction, *Homeland Housewares, LLC* v. *Whirlpool Corp.*, 865 F.3d 1372, 1374 (Fed Cir. 2017), and patent eligibility on grounds like obviousness, *Unwired Planet, LLC* v. *Google Inc.*, 841 F.3d 995, 1000 (Fed. Cir. 2016). The PTAB's findings of fact are also subject to review. And while that review is for substantial evidence, *ibid.*, the Federal Circuit ensures meaningful appellate scrutiny by insisting (again applying settled administrative law principles) that the PTAB "provide 'a reasoned basis for [the PTO's] action'" so that the appellate court may "see that the agency has done its job." *In re Nuvasive, Inc.*, 842 F.3d 1376, 1383 (Fed Cir. 2016) (quoting *Bowman Transp., Inc.* v. *Ark.-Best Freight Sys., Inc.*, 419 U.S. 281, 285, 286 (1974)) (alteration added).

The Federal Circuit also actively polices the PTAB's procedures, including to ensure that litigants' procedural due process rights are fully honored. For example, the Federal Circuit recently held that the PTAB violated the Administrative Procedure Act (APA) by not providing adequate notice and an opportunity to respond with respect to reliance on certain prior art in final written decision. *EmeraChem Holdings, LLC* v. *Volkswagen Grp. of Am., Inc.*, 859 F.3d 1341, 1348-1352 (2017). Similarly, the Federal Circuit has actively enforced the PTAB's "obligation to fulfill its APA duty to provide a satisfactory explanation for its action," including by vacating the PTAB's decision in a series of IPRs because the PTAB did not make a sufficient record for the court of appeals to evaluate the propriety of a decision to exclude an expert witness's testimony. *Ultratec, Inc.* v. *CaptionCall, LLC*, 872 F.3d 1267, 1274-1275 (2017) (internal quotation marks and citation omitted).

In some respects, the AIA's proceedings have fostered *greater* judicial review and guidance from the Federal Circuit. Because IPR is time-limited, focused, and inexpensive, and because IPRs will end with a reasoned opinion subject to thorough review in the Federal Circuit, IPR proceedings are highly likely to proceed to conclusion, followed by appeal to the Federal Circuit. By contrast, due to many factors, including length and cost of district court proceedings, and the fact that the black box jury system makes appeal from adverse jury determinations very difficult, most district court proceedings are settled before reaching a final judgment, meaning there is no appeal. See Jason Rantanen, *The Federal Circuit and Appeals from the Patent Office*, Patently-O

(Dec. 4, 2016), https://patentlyo.com/patent/2016/12/federal-circuit-appeals.html; Jason Rantanen, *Federal Circuit Now Receiving More Appeals Arising from the PTO than the District Courts*, Patently-O (Mar. 2, 2016), https://patentlyo.com/patent/2016/03/receiving-appeals-district.html (showing "dramatic rise" in appeals to Federal Circuit resulting from IPR); John R. Allison et al., *Understanding the Realities of Modern Patent Litigation*, 92 Texas L. Rev. 1769, 1780 (2014) ("[M]ore than 90% of [patent] lawsuits settle before the court resolves summary judgment or tries the case."). This growing number of appeals improves the quality of the patent system by providing a healthy body of Federal Circuit case law to guide the PTAB and examiners.

The extensive involvement of the Article III appeals court in reviewing the PTAB's rulings ameliorates any constitutional concerns from the fact that the proceedings occur in the first instance before a non-Article III tribunal. See *Executive Benefits Ins. Agency* v. *Arkison*, 134 S. Ct. 2165, 2175 (2014) (holding that de novo review by district court obviated concern that non-Article III official initially adjudicated the parties' dispute).

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In crafting IPRs as a system for intra-agency review of the initial decision to issue a patent, Congress has done so in a manner consistent with the well-established patent examination process and one that is likely to generate a high-quality outcome for the small percentage of patents that are subject to PTO review to reevaluate the correctness of the examiner's original decision on patentability.

II. THE AIA BENEFITS LITIGANTS AND THE PATENT LITIGATION SYSTEM

Due to the central role of intellectual property in its business, Apple is, at all times, actively engaged in patent matters in a variety of venues, including initial patent prosecution before examiners at the PTO, post-issuance proceedings at the PTO, and infringement litigation in various venues. Apple believes its experience may provide insight to the Court on the salutary benefits of the AIA for litigants because it filed almost 5% of the total number of IPR petitions filed from 2012 through 2016. Sameni, *supra*.

Since the AIA was enacted, Apple has observed in several of its own cases challenging patents of others that PTAB proceedings, including IPR, are efficient, fair, and balanced. Nor is this experience unsurprising: this Court has itself observed that "[c]laims generally can be resolved much more quickly and economically in proceedings before an agency than in litigation in federal court." *Woodford* v. *Ngo*, 548 U.S. 81, 89 (2006). .

A. Adjudication Of Patentability Before The PTAB Saves Litigants Substantial Time And Money And Conserves Judicial Resources

Proceedings in the PTAB conserve litigants' financial resources and avoid the unnecessary expenditure of judicial resources. First, because of Congress's choice to place firm deadlines in the statute, the timeline of an IPR is much shorter and much more predictable than district court litigation. The PTAB must determine whether to institute IPR no later than three months after the preliminary response to the IPR petition is due,

35 U.S.C. 314(b), and it must issue its Final Written Decision on patentability a maximum of one year (or an additional six months on good cause) after institution, 35 U.S.C. 316 (a)(11), 37 C.F.R. 42.100(c). In district courts, however, a ruling on validity often must await several lengthy processes, including discovery, motions practice, and trial, which can stretch on for years.

Because they are time-constrained proceedings that focus on narrow legal issues, IPRs have already been very successful in saving litigants, including both patentees and accessed infringers, substantial resources. By one estimate, as of 2015, the average cost of litigating a single IPR petition to final decision was $340,000, and the average cost of litigating a set of related IPR petitions was $722,000. In contrast, the mean total legal defense of defending a patent case through to trial in federal court was $9.5 million. RPX Corp., *2015 Report: NPE Litigation, Patent Marketplace, and NPE Cost*, https://www.rpxcorp.com/wp-content/uploads/sites/2/2016/07/RPX-2015-Report-072616.FinalZ.pdf. By a more recent estimate, as of 2017, the median estimated total cost of post-grant proceedings is $250,000 through PTAB hearing and $350,000 through appeal. See Am. Intellectual Prop. Law Ass'n, *Report of the Economic Survey* 51 (June 2017). In contrast, the median estimated total cost of a patent infringement suit through trial and appeal ranged from $2,000,000 to $3,000,000 depending upon how much money was at risk. *Id.* at 46. Litigating a patent dispute in federal district court is substantially more expensive than litigating the invalidity of the patents at issue in IPRs.

According to one analysis, requests to stay pending PTAB proceedings through the end of 2016 ranged from

around 37% to around 73% in six popular patent districts. See Docket Report, *Success Rates on Requests to Stay Pending IPR, CBM, or PGR through 2016* (Feb 16, 2017), http://docketreport.blogspot.com/2017/02/success-rates-on-requests-to-stay.html. Even under a conservative estimate, assuming that each district court litigation would take three IPRs (litigated through appeal) to resolve, the median litigant in *each case* saved approximately $1 million to $2 million dollars by proceeding in the PTAB while those district court proceedings were stayed. And the savings likely grow significantly when factoring in district court cases that have been streamlined and narrowed—even if not entirely obviated—by PTAB proceedings and decisions. The overall savings for the system can be estimated by multiplying the median savings per case by the number of district court cases affected by a post-grant proceeding. While it is difficult to provide an exact estimate of the number of cases so impacted (for example, because litigants may file multiple petitions against the same patent or because IPR is filed without concurrent litigation), the PTAB has instituted IPR on over 32,000 patent claims as of March 2017, which demonstrates the wide, positive effect of the AIA. PTO, Patent Trial and Appeal Board Statistics 12 (Mar. 31, 2017), https://www.uspto.gov/sites/default/files/documents/AIA%20Statistics_March2017.pdf.[5]

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[5] Some commentators have suggested that the aggregate savings resulting from IPR ranges to at least $2.31 billion. Josh Landau, *Inter Partes Review: Five Years, Over $2 Billion Saved*, Patent Progress (Sept. 14, 2017), https://www.patentprogress.org/2017/09/14/inter-partes-review-saves-over-2-billion/.

Given the statutory timelines and likely expense of PTAB proceedings, a company sued for infringement that has recourse to the PTAB can predict potential future costs and likely duration of proceedings in the PTAB with much better accuracy than it can in district court litigation, where the potential for an unexpected discovery ruling or jury verdict always looms. This is true even if the petitioner does not prevail before the PTAB; knowing that three experienced administrative judges have found claims patentable can significantly streamline further district court proceedings and inform a patent owner's decision-making with respect to potential settlement. This advantage greatly improves the parties' ability to evaluate litigation prospects and exposure. In fact, statistics demonstrate that the availability of IPR has affected significantly parties' settlement practices in district court. For cases filed between 2012 and 2014 and settled by November 1, 2015, in which a related IPR petition had been filed, the majority of cases settled within 180 days of the IPR petition being filed. Sam Jaffna et al., *How PTAB proceedings are driving district court settlements*, Intellectual Asset Management 39 (March/April 2016), https://www.scribd.com/doc I/314743001/IAM76-PTAB-impact-v6#download&from _embed.

Apple believes that its experiences of time and cost savings in three cases, *SightSound Technologies, LLC* v. *Apple, Inc.*, *Jongerius Panoramic Technologies, LLC* v. *Apple, Inc.*, and *Global Touch Solutions, LLC* v. *Apple Inc.*, are representative examples of its cases before the PTAB challenging patents on which it has been sued.

1. *SightSound Technologies, LLC* v. *Apple, Inc.*

In 2011, SightSound Technologies, LLC (SightSound) filed an infringement suit against Apple with respect to three patents. See Compl., *SightSound Technologies, LLC* v. *Apple, Inc.*, No. 2:11-cv-01292-DWA (W.D. Pa. filed Oct. 10, 2011), ECF No. 1. SightSound filed the case in the U.S. District Court for the Western District of Pennsylvania, which sits in Pittsburgh, where SightSound is based. The patents-in-suit, each directed to nothing more than the sale of digital video or audio signals over a network (such as the Internet), had previously been successfully asserted against other defendants, also in cases filed in the same court. See *SightSound.com Inc.* v. *N2K, Inc.*, No. 2:98-cv-00118-DWA (W.D. Pa. filed Jan. 16, 1998); *SightSound Techs., LLC* v. *Roxio, Inc.*, No. 2:04-cv-01549-DWA (W.D. Pa. filed Oct. 8, 2004).

Apple denied infringement and counterclaimed, asserting claims of invalidity with respect to the patents-in-suit. First Am. Answer & Counterclaims, *SightSound Techs., LLC, supra* (Mar. 12, 2012), ECF No. 48. A special master was appointed, claim construction proceedings and fact discovery were complete, and expert discovery was underway. On May 6, 2013, Apple filed petitions with the PTAB for CBM review of certain key claims of two of the patents-in-suit, U.S. Patent Nos. 5,191,573 (the '573 Patent) and 5,966,440 (the '440 Patent), on the ground that they were obvious under 35 U.S.C. 103. See Nos. CBM2013-00020 and CBM2013-00023. The district court granted Apple's motion to stay proceedings pending resolution of the CBM cases, and the PTAB instituted CBM review on October 8, 2013. A

year later, the PTAB issued unanimous final decisions holding that all challenged claims were obvious, and fourteen months later, a unanimous panel of Federal Circuit judges affirmed. *SightSound Techs., LLC* v. *Apple, Inc.*, 809 F.3d 1307 (2015), cert. denied, 137 S. Ct. 813 (2017). The district court case then resolved with a judgment in favor of Apple on the canceled claims.

The PTAB proceedings, from petition to final written decision, took only 17 months. The PTAB proceedings, including appeal to the Federal Circuit, cost Apple only a third of what Apple had already spent on the district court litigation, even though the district court had only proceeded up to expert discovery, at which point the litigation was stayed.

2. *Jongerius Panoramic Technologies, LLC* v. *Apple, Inc.*

Apple also witnessed firsthand the efficiencies of the PTAB process in connection with an infringement case initially filed in the U.S. District Court for the Middle District of Florida in 2012. The plaintiff, Jongerius Panoramic Technologies, LLC (JPT, also known as PanoMap Technologies, LLC) alleged that Apple and Google, Inc. (Google) infringed U.S. Patent No. 6,563,529 (the '529 Patent). Compl., *Jongerius Panoramic Techs., LLC* v. *Apple, Inc.*, No. 6:12-cv-00308 (M.D. Fla. filed Feb. 24, 2012), ECF No. 1. The claims of the '529 Patent were directed to the simultaneous display of (1) a sector of a room, the view of which could be rotated and (2) a topographical map of the region, with highlighting of the sector displayed in (1). Apple denied infringement and counterclaimed, asserting that the asserted claims of the

'529 Patent were invalid. Corrected Answer & Counterclaims, *Jongerius, supra*, No. 6:12-cv-00308 (May 23, 2012), ECF No. 46. On motion by Apple and Google, the case was transferred to the Northern District of California, and discovery began. Apple and Google filed a petition for IPR of the '529 Patent with the PTAB on March 15, 2013, in case no. IPR2013-00191. JPT promptly stipulated to a stay of the district court proceedings pending the outcome of the IPR petition. Stip. Stay Litig., *Jongerius Panoramic Techs., LLC* v. *Google Inc.*, No. 4:12-cv-03797-YGR, (N.D. Cal. Apr. 12, 2013), ECF No. 155.

The PTAB instituted trial on all of the challenged claims of the '529 Patent on August 19, 2013, and, seventeen months after Apple and Google originally filed their petition, the PTAB issued a unanimous final written decision holding all of the challenged claims unpatentable under either 35 U.S.C. 102 or 103. *Google Inc.* v. *Jongerius Panoramic Techs., LLC*, No. IPR2013-00191, 2014 WL 4059861 (Aug. 12, 2014). In light of the PTAB's ruling in the IPR, the parties agreed to dismissal of the district court case with a judgment in favor of Apple and Google. Jt. Stip. Dismissal, *Jongerius, supra*, No. 4:12-cv-03797-YGR (Sept. 19, 2014), ECF No. 174.

As in the *SightSound* litigation, Apple estimates that having recourse to the PTAB resulted in substantial savings of money and time. The PTAB proceeding, from petition to final written decision, took only 17 months. Apple spent on the entire PTAB proceeding only a tenth of the amount that Apple had budgeted to spend on the district court litigation, just on pre-trial proceedings, and not counting the expense of trial, post-trial, and appeal proceedings.

3. *Global Touch Solutions, LLC* v. *Apple Inc.*

In some instances, a successful outcome at the PTAB will have an efficiency multiplier effect, resolving multiple district court cases filed by a single plaintiff against multiple defendants. That outcome occurred in a series of patent infringement suits filed by plaintiff Global Touch Solutions, LLC (Global Touch) against Toshiba Corporation, Toshiba Information Systems, Inc., VIZIO, Inc., Motorola Mobility LLC, Microsoft Mobile, Inc., and Apple Inc. See *Global Touch Solutions, LLC* v. *Toshiba Corp.*, No. 3:15-cv-02746-JD (N.D. Cal. filed July 9, 2014) (lead case). Global Touch asserted eight patents against these defendants across five separate cases—ranging from three patents against Toshiba, five patents against Apple, six patents against VIZIO, and all eight patents against Microsoft and Motorola. The PTAB instituted sixteen IPR trials to determine the validity of the eight asserted patents. See Jt. Status Update at 3-4, *Global Touch*, *supra* (Apr. 3, 2017), ECF No. 105 (listing 16 IPR trials). All sixteen trials terminated favorably to the Defendants. *Ibid.* In two of the trials, Global Touch filed statutory disclaimers canceling all the challenged claims and received adverse judgment from the PTAB. *Ibid.* Across the remaining fourteen trials, the PTAB invalidated all remaining challenged claims. *Ibid.* In view of the PTAB's rulings in each of the IPR proceedings, judgment of invalidity was entered for each of the eight asserted patents. Judgment, *Global Touch*, *supra* (N.D. Cal. May 24, 2017), ECF No. 111.

Apple spent only about one eighth on the IPR proceedings of what it had budgeted for the *Global Touch*

litigation if the case had proceeded to trial in district court. Apple thus estimates that the availability of IPR saved it roughly many millions of dollars, and it is likely that the other defendants experienced similar savings.

B. Even Where The Litigation Is Not Resolved By Proceedings Before The PTAB, The IPR Process Will Often Focus The Parties' Disputes And Conserve Judicial Resources

Another of Apple's cases, *Aylus Networks, Inc.* v. *Apple Inc.*, shows how the PTAB's procedures can narrow the parties' disputes to discrete, core issues and provide an opportunity for the patentee to clarify the exact scope of his or her invention. These procedures can avoid the unnecessary expenditure of judicial resources. In *Aylus*, the plaintiff (Aylus) sued Apple for infringing U.S. Patent RE No. 44,412 ('412 Patent). Apple filed two IPR petitions, which together covered all of the claims of the '412 Patent. The PTAB (after reviewing Aylus's preliminary responses) declined to institute review with respect to claims 2, 4, 21, and 23. *Apple, Inc.* v. *Aylus Networks, Inc.*, No. IPR2014-01566, 2015 WL 1870711 (Apr. 23, 2015); *Apple, Inc.* v. *Aylus Networks, Inc.*, No. IPR2014-01565, 2015 WL 1870710 (Apr. 22, 2015). Aylus then dismissed with prejudice its infringement claims with respect to all claims *except* 2 and 21. Notice of Voluntary Dismissal, *Aylus Networks, Inc.* v. *Apple Inc.*, No. 3:13-cv-4700-EMC (N.D. Cal. May 29, 2015). Thus, the PTAB's assessment of which claims were likely to survive review helped focus the district court litigation when it proceeded.

The proceedings before the PTAB also helped shape the substantive litigation on the claims that went forward. In light of statements that Aylus had made in its preliminary response to the IPR petition regarding the scope of those two claims, Apple was able to move for summary judgment of noninfringement, arguing that the patentee's limitation of its claims (in order to avoid invalidity before the PTAB) made clear that Apple's products were not covered. The district court granted the motion and the Federal Circuit affirmed, holding that "Aylus's statements to the Board during the IPR proceeding regarding claims 2 and 21 constitute[d] a clear and unmistakable surrender of methods." *Aylus Networks, Inc.* v. *Apple Inc.*, 856 F.3d 1353, 1363 (2017). The Federal Circuit reasoned that Aylus's position before the PTAB was made as part of "reexamination of an earlier administrative grant of a patent" and thus bound Aylus in later district court litigation through the doctrine of prosecution disclaimer. *Id.* at 1361.

The *Aylus* litigation thus shows that, even when an IPR petitioner does not persuade the PTAB to institute review on all challenged claims, the IPR process nonetheless can help narrow the parties' disputes and clarify the scope of the patent in subsequent litigation. Instead of litigating all 33 claims of the '412 Patent, with the vast costs attending discovery in cases involving numerous claims, the parties litigated only two claims, and they proceeded through summary judgment and appellate review far more quickly than they otherwise would have.

C. The PTAB's Transparent Procedures Create Indirect Benefits For The PTO That Improve The Patent System

Finally, the PTAB's procedures improve the patent system as a whole because they necessarily have positive externalities for the entire PTO. As discussed *supra*, IPR proceedings (and other post-grant review proceedings) are focused yet robust: the only issue in the proceeding (unlike in an Article III court) is the patentability of the claim or claims at issue, but the parties typically file multiple briefs and present oral argument. They are guaranteed a reasoned written decision addressing their arguments, and, in many cases, the PTAB also writes substantial institution decisions. Through its clear rules and due to its experienced judges, the PTAB generates a thorough and reasoned record for appeal and, in many cases, parties have taken advantage of Federal Circuit review.

This narrow-but-detailed, time-limited process is an immediate and focused feedback loop that has positive benefits and generates efficiencies across the PTO. Patent examiners can access easily the statements a patentee makes in IPR, as well as the art and arguments that parties cite. See Eldora Ellison & Jacob Rothenberg, *A Survey of Patent Owner Estoppel at USPTO*, Law360 (Sept. 26, 2017). The increased accessibility of this information improves the examiners' decision-making when evaluating related patent applications, which leads to greater agency consistency across multi-patent portfolios, and the feedback is of particular value because it applies the same standards and claim construction. See pp. 11-16 *supra*. This benefit is buttressed by the "patentee estoppel" rule that the PTO promulgated

subsequent to enactment of the AIA, 37 C.F.R. 42.73(d)(3), which bars patentees from taking actions at the PTO inconsistent with an adverse PTAB judgment. Ellison & Rothenberg, *supra*. Accordingly, the advent of IPR has resulted in indirect improvements to the entire patenting process which, in turn, benefit the patent system as a whole.

CONCLUSION

For the foregoing reasons, the judgment of the court of appeals should be affirmed.

Respectfully submitted.

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